Only those regulations published by the Georg-August-Universität Göttingen in its Official Bulletins are legally binding. Any claims to rights or titles resulting from the English translation of these regulations are expressly excluded.

Faculty of Geoscience and Geography:

Following the decision of the Faculty Council of the Faculty of Geoscience and Geography on 13.05.2024 and the opinion of the Senate on 12.06.2024, the Presidential Board of the Georg-August-Universität Göttingen approved the examination and study regulations for the consecutive Master's degree programme "Earth and Environmental Sciences" on 26.06.2024 (§ 44 section 1 sentence 2 NHG in the version published on 26.02.2007 (Nds. GVBI. p. 69), last amended by Article 12 of the Act of 14.12.2023 (Nds. GVBI. p. 320); § 41 section 2 sentence 2 NHG; § 37 section 1 sentence 3 no. 5 b), § 44 section 1 sentence 2 NHG).

Examination and study regulations for the consecutive Master's degree programme "Earth and Environmental Sciences" at the University of Göttingen

§ 1 Scope of application

- (1) The provisions of the "General Examination Regulations for Bachelor's and Master's Degree Programmes and Other Degree Programmes at the University of Göttingen" (APO), as amended, apply to the consecutive Master's degree programme "Earth and Environmental Sciences" at the Georg-August-Universität Göttingen.
- (2) These regulations govern the additional provisions for the Master's degree programme "Earth and Environmental Sciences".

§ 2 Aim of the programme, purpose of the examination

- (1) The degree programme "Master of Science" (M.Sc.) prepares students to work as geoscientists in university and non-university research institutions, administrations and authorities, consulting and engineering offices, international organisations and comparable institutions as well as various branches of industry (including raw materials, building materials, ceramics and glass, foundation engineering, water and waste management, environmental protection, insurance).
- (2) ¹Geosciences are natural sciences that deal with the composition, structure, history and the present and future state of the earth and its habitats. ²They investigate the biological, chemical and physical principles of the development of the earth and life and the interactions

between the lithosphere, hydrosphere, cryosphere, atmosphere and biosphere in the earth system.

- (3) ¹The master's degree programme aims to provide students with in-depth knowledge of the geosciences and their sub-disciplines with a clear focus on current scientific issues, methods and developments, building on a solid foundation in the natural and geosciences. ²This enables graduates of this degree programme to understand, assess, apply and further develop new scientific findings in a technically sound manner. ³The aim is to enable them to work successfully and at a high scientific level in the various application areas of the geosciences. ⁴The degree programme also forms the basis for further doctoral studies.
- (4) In addition to specialist knowledge, the master's degree programme imparts key skills for a successful career start and for admission to postgraduate doctoral studies.
- (5) The master's degree programme in Earth and Environmental Sciences qualifies students for senior and responsible positions in a variety of business sectors (e.g. raw materials, building materials, ceramics and glass, foundation engineering, water and waste management, environmental protection, insurance), authorities and administrations (e.g. local authorities, federal states, federal government, EU, UN) and for further scientific activities (e.g. museums, universities, non-university research institutions) including doctoral programmes.
- (6) Successful completion of the module examinations and the written thesis (master's thesis) establishes that the candidate has acquired the in-depth specialist knowledge in the geosciences and their sub-disciplines required for the study objectives, understands the relationships between individual sub-disciplines and has the ability to work according to scientific principles and to scrutinise geoscientific models, as well as to communicate geoscientific findings.

§ 3 Academic degree

After passing the final examination, the University of Göttingen awards the academic degree "Master of Science" (abbreviated to "M.Sc.").

§ 4 Recommended prior knowledge

¹Very good knowledge of the English language is required for successful study and a smooth course of study. ²Applicants whose knowledge is not sufficient are recommended to undertake appropriate further training before commencing the master's programme.

§ 5 Structure of the degree programme, standard course length, area of specialisation, course of study

- (1) The degree programme can be started in the summer and winter semesters.
- (2) The standard course length is four semesters.
- (3) The degree programme cannot be studied part-time.
- (4) The degree programme comprises at least 120 credit points (ECTS credits; abbreviated to
- C), which are distributed as follows:
 - a) Core subject studies including specialisation (60 C)
 - b) Professionalisation area (30 C)
 - c) Master's thesis (30 C)
- (5) Within the scope of the core subject studies, it is possible to specialise.
- (6) ¹The coursework and examinations are to be completed in compulsory, compulsory elective and elective modules. ²These compulsory, compulsory elective and elective modules are specified in the module overview (Appendix 1). ³The module catalogue is published separately; it is an integral part of these regulations insofar as the modules are listed in the module overview. ⁴An overview of the distribution of the modules in the course of study can be found in the appendix (Appendix 2).
- (7) The degree programme offers the opportunity to specialise and acquire professional skills according to individual ideas and plans, particularly in the specialisation and professionalisation areas.
- (8) ¹The area of specialised study consists of compulsory and compulsory elective modules and, in addition to the consolidation of basic and specialised geoscientific knowledge in the compulsory curriculum (24 C), comprises the specialisation study with compulsory elective modules totalling 36 C. ²The compulsory curriculum includes modules on geodynamics, environmental geology, regional geology and modules on digital and laboratory analytical applications. ³The specialisation can be in the subject areas "Ecosystem, Evolution and Environment" or "Elements, Minerals and Rocks" or "Geology". 4The degree programme can also be completed without specialisation ("studium generale").
- (9) ¹The professionalisation area comprises 30 C and consists of a compulsory module (6 C) in the close context of the master's thesis, as well as freely selectable key competence modules of at least 12 C. ²In addition, there is a freely selectable area for the acquisition of scientific and interdisciplinary competences from the field of geosciences or other subjects (elective area, 12 C).

(10) ¹General recommendations for the appropriate structure of the degree programme are based on the completion of the core subject studies according to the study plan. ²Recommendations regarding the selection of modules suitable for the desired profile are made during the course counselling.

§ 6 Admission requirements for modules and courses

- (1) ¹Admission to certain courses or modules (hereinafter: courses) may be restricted by resolution of the Faculty Council if the content-related nature of the course or its proper implementation makes this necessary (see maximum number of students per module or course in the module directory). ²The conditions of admission must be announced in advance. ³Places are allocated by the course director. ⁴In the event of a conflict, the Dean of Studies shall decide.
- (2) ¹In the event that there are more applications than places available and no parallel courses can be offered, applications for admission to courses with a limited number of places in accordance with section 1 will be considered according to ranking groups in the following order, whereby the applications of students of this degree programme or a degree programme for which the Faculty of Geoscience and Geography provides teaching exports have priority over students of other non-faculty degree programmes for courses relating to compulsory or compulsory elective modules of this degree programme or the importing degree programme:
 - a) Registrations from students in the respective subject semester for which the course is offered as a compulsory course according to the study regulations or examination regulations and who have not yet attended and successfully completed this course, and from students in the immediate vicinity of graduation. Students who have fulfilled the requirements according to sentence 1 in the previous semester and were unable to obtain a place despite proper registration or who were not accepted due to the allocation of a compulsory course taking place at the same time in a subject studied at the same time shall be treated equally. Sentence 1 and sentence 2 apply accordingly for courses related to study sections.
 - b) Registrations by students from subject semesters who deviate from the requirements in letter a) by one semester or were unable to successfully complete the course in the previous semester or were unable to regularly attend or successfully complete the course in the previous semester due to illness - without being on leave of absence. The existence of an illness must be documented by a medical certificate.

- c) Registrations of students from subject semesters that deviate from the requirements under letter a) by two or more semesters.
- d) Registrations of students in the respective subject semester or study section for which the course is offered as a compulsory elective course according to the study regulations and who fulfil the requirements under letter a).
- e) Registrations of students from semesters that deviate from the requirements under letter d) by one or more semesters.
- f) Registrations from students who wish to attend the course as an elective course as part of their degree programme.
- g) Other registrations from students.

²If not all registrations of a ranking group can be considered, the time of registration or, if there is also a tie between applicants in this case, the lot decides. ³The procedure must be publicised in good time in advance. ⁴The Faculty Council shall, together with its decision in accordance with sentence 1, set a final dead line for registration for this course.

- (3) ¹If not all students in the ranking groups according to section 2 letters a) to c) can be considered for the course in one semester, the Faculty Council must determine a sufficiently higher number of places for the next semester within the scope of personnel and material possibilities. ²This does not apply if the number of participants is expected to be such that students in the ranking groups in accordance with section 2 letters a) to c) can be expected to be considered.
- (4) The Faculty Council may institute a centralised procedure for access to certain courses in its area that deviates from the procedure in sections 2 and 3.

§ 7 Admission to the master's thesis

- (1) Admission to the master's thesis requires that all compulsory modules of the degree programme have been passed and a total of at least 60 C have been successfully earned.
- (2) ¹Admission to the master's thesis must be applied for in writing to the responsible examination board. ²The following documents must be enclosed:
 - a) the proposed topic for the master's thesis,
 - b) a proposal for the two assessors,
 - c) proof of fulfilment of the requirements in accordance with section 1,
 - d) confirmation from the supervisor, if applicable.

³The proposal according to letters a) and b) is not required if the student assures that he/she has not found a supervisor. ⁴In this case, the Examination Board shall appoint supervisors and determine the topic of the master's thesis.

(3) ¹The responsible Examination Board decides on admission. ²Admission is to be refused if the admission requirements are not met or if the master's examination in the same or a closely related degree programme at a university in Germany or abroad has been definitively failed.

§ 8 Subject-specific forms of examination

In addition to the examinations permitted under the provisions of the APO, the following subject-specific examinations may be provided for:

- a) Protocol: A protocol is a written account of procedures, observations and interpretations in the field or laboratory.
- b) Report: A report is a presentation of observations, procedures and results in the field or laboratory. In a report, the research question, the methods used, a discussion of the results and the resulting conclusions are presented in detail. A report contains suitable graphical elements (such as tables, diagrams, figures, maps, etc.) and the citation of the literature and sources used.
- c) Portfolio: A portfolio is a compilation of various achievements defined in the course (e.g. reports, tests and protocols etc.) which can be used to demonstrate learning progress.
- d) Testat: A testat is a short written or oral examination to promptly test the material learnt accompanying the course.
- e) Internship report: An internship report contains a written description of the respective institute, the areas of work and tasks familiarised with and the activities carried out. It also reflects on the experience gained, discusses the usefulness of the knowledge and skills from previous studies for the internship activities and also describes what additional knowledge and skills were gained from working in the institute. Furthermore, the relevance of the internship for the student's own career prospects is reflected upon. The successful completion of the internship must be documented by a certificate from the internship provider.

§ 9 Master's thesis

(1) ¹By means of the written master's thesis, the candidate should demonstrate that he/she is able to work on a problem using geoscientific methods within the specified period of time,

develop an independent, scientifically based judgement, arrive at scientifically sound statements and present the results appropriately in terms of language and form. ²The topic of the master's thesis must be chosen from the field of geosciences.

- (2) ¹The provisional topic of the master's thesis must be agreed with the supervisor and submitted to the relevant examination board with confirmation from the supervisor. ²If the candidate is unable to find a supervisor, a supervisor and a topic will be determined by the responsible examination board. ³The candidate must be consulted on the choice of topic. ⁴The right to propose a topic does not constitute a legal claim. ⁵The topic of the master's thesis is issued by the Examination Office. ⁶The time of issue must be recorded.
- (3) ¹The processing time for the master's thesis is 6 months. ²At the candidate's request, the responsible Examination Board may, in agreement with the supervisor, extend the processing time by a maximum of 8 weeks (final deadline) if there is an important reason that is not attributable to the candidate. ³An important reason is usually illness, which must be reported immediately and documented by a medical certificate.
- (4) ¹The topic may only be returned once and only within the first 8 weeks of the processing period. ²A new topic will be issued immediately, but at the latest within 8 weeks. ³The binding choice of subject already made remains unaffected by the return of the topic. ⁴If the master's thesis is repeated, the topic may only be returned in accordance with sentence one if the person being examined did not make use of this option when writing the master's thesis for the first time.
- (5) ¹The master's thesis must be submitted on time and exclusively in the format of a commonly used word processing programme or in PDF format (unprotected); submission is usually done by upload via the examination administration system. ²Students who can demonstrate that this is not reasonable for them will be supported by the University. ³The time of submission must be recorded. ⁴When submitting the thesis, the candidate must affirm that he/she has written the thesis independently and has not used any sources or aids other than those specified.
- (6) ¹The Examination Office forwards the master's thesis to the first supervisor and the second supervisor as reviewers. ²Each reviewer awards a grade.
- (7) The duration of the assessment procedure should not exceed 6 weeks.

§ 10 Overall result, final failure

(1) ¹The master's examination is passed if at least 120 credits have been earned and all required module examinations and the master's thesis have been passed. ²The Master's degree programme in Earth and Environmental Sciences is completed at the end of the

semester in which the master's examination is passed, definitively failed or deemed to have failed.

- (2) The grade "with distinction" is awarded if the master's thesis was graded with at least 1.3 and the overall average of all other examination results is at least 1.3.
- (3) A notification of final failure of the master's examination will be issued, which must be accompanied by information on legal remedies.
- (4) When calculating the overall grade, two modules of the degree programme totalling up to 15 C shall be disregarded at the student's request by converting the graded module examinations passed into ungraded module examinations; the request must be submitted at the latest before the examination certificate is issued; alternatively, the request can be submitted once before a change of university; the request can only be submitted once and can no longer be withdrawn once it has been implemented in the examination administration system.

§ 11 Examination Board

- (1) ¹The Faculty of Geoscience and Geography shall form an Examination Board to organise the examinations and to perform all tasks assigned by these examination regulations. ²The Examination Board shall consist of five members appointed by the group representatives on the Faculty Council, namely three members of the university teachers' group, one member of the staff group and one member of the student group. ³A deputy is appointed for each member at the same time. ⁴If a member leaves prematurely, the corresponding status group in the Faculty Council shall appoint a successor for the remaining term of office.
- (2) ¹The Examination Board elects a chairperson from the group of university teachers' and a deputy chairperson. ²The deputy chairperson may also be a member of the staff group.

§ 12 Study advisory service

(1) ¹Students have the opportunity to consult the faculty's study advisory service throughout their studies. ²This service has the task of supporting individual study planning. ³Students are recommended to consult the study advisory service, particularly at the beginning of their studies and before making decisions about changes to their study plans or about the structure of their electives; they should also consult the study advisory service when planning to study abroad and after failing examinations.

(2) Individual study advice by a lecturer of the faculty is strongly recommended if the student is only entitled to one repetition option for the examination of a compulsory or compulsory elective module.

§ 13 Entry into force; transitional provisions

- (1) These regulations shall enter into force on 01.102024 following their publication in the Official Announcements I of the Georg-August University of Göttingen.
- (2) At the same time, the examination and study regulations for the consecutive Master's degree programme "Geosciences" in the version published on 19.19.2019 (Official Announcements I No. 41/2019 p. 793), last amended by resolution of the Presidential Board on 13.10.2023 (Official Announcements I No. 30/2023 p. 1113), shall cease to be in force.
- (3) ¹Students who began their studies before these Examination and Study Regulations came into force and have been continuously enrolled on the Master's degree programme in Geosciences will be examined in accordance with the provisions of the Examination and Study Regulations as defined in section 2. ²In the case of examinations still to be taken, this does not apply to module descriptions, unless the protection of a student's legitimate expectations requires a different decision by the Examination Board. ³A deviating decision is possible in particular in cases in which an examination can be repeated or a compulsory or compulsory elective module has been significantly changed or cancelled. ⁴The Examination Board may issue general regulations in this regard. ⁵Examinations in accordance with the examination and study regulations as defined in section 2 will be taken for the last time in summer semester 2026. ⁶Upon application, students pursuant to sentence 1 shall be examined in accordance with the provisions of these regulations.

Appendix I Module overview

Master's degree programme "Earth and Environmental Sciences"

A total of at least 120 C must be completed.

1. Core subject studies

Modules totalling 60 C must be successfully completed in accordance with the following provisions.

a. Compulsory modules

The following four modules totalling 24 C must be successfully completed:

M.EES.101	Earth Science, Environment and Society	(6 C/4 WLH)
M.EES.102	Earth and Environmental Sciences in the Field	(6 C/6 WLH)
M.EES.103	Analytical, Experimental, and Preparation Methods in Earth a	and Environmental
	Sciences	(6 C/4 WLH)
M.EES.104	Digital Methods in Earth and Environmental Sciences	(6 C/4 WLH)

b. Compulsory elective modules

At least six of the following modules totalling at least 36 C must be successfully completed:

i. Ecosystem, Evolution and Environment

M.EES.201	Environmental Geoscience	(6 C/4 WLH)					
M.EES.202	Geobiology	(6 C/6 WLH)					
M.EES.203	Environmental Geomicrobiology	(6 C/5 WLH)					
M.EES.204	Molecular Geobiology	(6 C/6 WLH)					
M.EES.205	Carbon and Organic Matter	(6 C/4 WLH)					
M.EES.206	Palaeobotany	(6 C/4 WLH)					
M.EES.207	Hydrogeochemistry	(6 C/5 WLH)					
M.EES.208	Earth Surface Dynamics and Associated Hazards	(6 C/4 WLH)					
M.EES.209	Climate and Glaciation	(3 C/2 WLH)					
M.EES.210	Critical Intervals in Geological History	(3 C/2 WLH)					
M.EES.211	Case Studies in Environmental Geoscience	(3 C/3 WLH)					
ii. Elements, Minerals and Rocks							
M.EES.301	Microanalytical Methods and Applications	(6 C/5 WLH)					
M.EES.302	Advanced Inorganic Geochemistry I	(6 C/4 WLH)					
M.EES.303	Advanced Inorganic Geochemistry II	(6 C/4 WLH)					

M.EES.304	Applied Isotope Geochemistry	(6 C/4 WLH)
M.EES.306	Advanced Geomaterials	(6 C/5 WLH)
M.EES.307	Petrochronology	(6 C/5 WLH)
M.EES.308	Experimental Petrology	(6 C/5 WLH)
M.EES.309	Cosmochemistry and Planetary Science	(6 C/4 WLH)
iii. Geology		
M.EES.401	Geodynamics	(6 C/6 WLH)
M.EES.402	Sedimentary Petrology and Economic Deposits	(6 C/5 WLH)
M.EES.403	Diagenesis, Temperature and Time in sedimentary Basins	(6 C/5 WLH)
M.EES.404	Sedimentary Provenance Analysis	(6C/4.5WLH)
M.EES.405	Rock Deformation across Scales	(6 C/5 WLH)
M.EES.406	Deformation modelling across Scales	(6 C/5 WLH)
M.EES.407	Applied Geothermics I	(6 C/6 WLH)
M.EES.408	Applied Geothermics II	(6 C/4 WLH)
M.EES.409	Advanced Geological Mapping	(6 C/6 WLH)
M.EES.410	Microtectonics and Metamorphism	(6 C/4 WLH)

2. Professionalisation area

Modules totalling at least 30 C must be successfully completed in accordance with the following provisions.

a. Compulsory module

The following module totalling 6 C must be successfully completed:

M.EES.105 Scientific Work (6 C/3 WLH)

b. Key competence modules

Key skills modules from the applicable university-wide module list of key skills totalling at least 12 C must be successfully completed. Alternatively, one or both of the following modules can be completed:

M.EES.601	External Internship for Master Students I	(6 C)
M.EES.602	External Internship for Master Students II	(6 C)
SK.Geo.100	Committee work in the Faculty of Geosciences and Geography	(3 C)
SK.Geo.200	Volunteering	(6 C)

Upon application to the Examination Board, further geoscience modules can be taken as key competence modules.

c. Elective modules

Further modules totalling at least 12 C must be successfully completed. The modules not yet completed in accordance with point 1 letter b and the modules listed below may be selected. Further geoscientific modules are available as elective options depending on the programme offered. Information about these options can be found on the degree programme website. In addition, modules from the University's range of courses can be completed, provided they are not listed in the university-wide module directory of key skills and the faculty offering the programme agrees to their use.

M.EES.502	Geological Field Studies	(6 C/6 WLH)
M.EES.503	Earth and Environmental Sciences Project	(6 C/1 WLH)
M.EES.504	Aspects of Earth and Environmental Sciences I	(3 C/3 WLH)
M.EES.505	Aspects of Earth and Environmental Sciences II	(6 C/4 WLH)
M.EES.506	Geological Mapping Project	(12C/3 WLH)
M.Geg.02	Resource Utilisation Problems	(6 C/4 WLH)
M.Geg.06	Quaternary Climate and Landscape Development	(5 C/3 WLH)

3. Master's thesis

The successful completion of the master's thesis earns 30 C.

Appendix II Exemplary study plans

a. Start of studies in the winter semester)

Masters Course "Earth and Environmental Sciences" - Model study plan for the start of studies in the winter semester									
1	M.EES.101 (6/4)		M.EES.	M.EES.2	01-409 (6 C) M.EES.2	01-409 (6 C)	Key Competer	nce module (6 C)	
2	M.EES.104 (6/4)	102 (6/6) 103 (6/6)		M.EES.	M.EES.201-409 (6 C) M.EES.201-409 (6 C)			M.EES.201-409 (6	i C)
3	M.EES.201-409 (6 C)	EES.201-409 (6 C) Elective Module (6 C)		105 (6/3)	Elective Module (6 C)	Key Compete	nce module (6 C	c)	
4				Mast	er thesis (30 C)				

Compulsory modules

M.EES.101 Earth Sciences, Environment & Society (6/4)

M.EES.102 Earth and Environmental Sciences in the Field (6/6)

M.EES.103 Analytical Methods in Earth and Environmental Sciences (6/6)

M.EES.104 Digital Methods in Earth and Environmental Sciences (6/4)

M.EES.105 Scientific Work (6/3)

Compulsory elective modules

Ecosystem, Evolution and Environment

M.EES.201 Environmental Geoscience (6/4)

M.EES.202 Geobiology (6/6)

M.EES.203 Environmental Geomicrobiology (6/5)

M.EES.204 Molecular Geobiology (6/6)

M.EES.205 Carbon and Organic Matter (6/4)

M.EES.206 Palaeobotany (6/4)

M.EES.207 Hydrogeochemistry (6/5)

M.EES.208 Earth Surface Dynamics and associated Hazards (6/4)

M.EES.209 Climate and Glaciation (3/2)

M.EES.210 Critical Intervals in geological History (3/2)

M.EES.211 Case Studies in Environmental Geoscience (3/3)

Compulsory elective modules

Elements, Minerals and Rocks

M.EES.301 Microanalytical Methods and Applications (6/5)

M.EES.302 Advanced inorganic Geochemistry I (6/4)

M.EES.303 Advanced inorganic Geochemistry II (6/4)

M.EES.304 Applied Isotope Geochemistry (6/4)

M.EES.306 Advanced Geomaterials (6/5)

M.EES.307 Petrochronology (6 /5)

M.EES.308 Experimental Petrology (6/5)

M.EES.309 Cosmochemistry and Planetary Science (6/4)

Geology

M.EES.401 Geodynamics (6/6)

M.EES.402 Sedimentary Petrology and Economic Deposits (6/5)

M.EES.403 Diagenesis in sedimentary Basins (6/5)

M.EES.404 Sedimentary Provenance Analysis (6/4,5)

M.EES.405 Rock deformation across Scales (6/5)

M.EES.406 Deformation modelling across Scales (6/5)

M.EES.407 Applied Geothermics I (6/6)

M.EES.408 Applied Geothermics II (6/4)

M.EES.409 Advanced Geological Mapping (6/6)

Elective modules

M.EES.502 Geological Field Studies (6/6)

M.EES.503 Earth and Environmental Sciences Project (6/1)

M.EES.504 Aspects of Earth and Environmental Sciences I (3/2)

M.EES.505 Aspects of Earth and Environmental Sciences II (6/4)

M.EES.506 Geological Mapping Project (12/3)

M.Geg.02 Ressourcennutzungsprobleme (6/4)

M.Geg.06 Quartäre Klima- und Landschaftsentwicklung (5/3)

... or modules from the university-wide programme.

Key Competence modules

M.EES.601 External Intership I (6 C)

M.EES.602 External Intership II (6 C)

SK.Geo.100 Gremienarbeit (3 C)

SK.Geo.200 Ehrenamtliches Engagement (6 C)

... or modules from the university's handbook of key competences.

b. Start of studies in the summer semester

Masters Course "Earth and Environmental Sciences" - Model study plan for the start of studies in the summer semester M.EES.104 (6/4) M.EES. M.EES. M.EES.201-409 (6 C) M.EES.201-409 (6 C) Key Competence module (6 C) 102 103 M.EES. M.EES.201-409 (6 C) M.EES.201-409 (6 C) M.EES.101 (6/4) M.EES.201-409 (6 C) (6/6)(6/6)105 3 Elective Module (6 C) M.EES.201-409 (6 C) Elective Module (6 C) (6/3)Key Competence module (6 C) 4 Master thesis (30 C)

Compulsory modules

M.EES.101 Earth Sciences, Environment & Society (6/4)

M.EES.102 Earth and Environmental Sciences in the Field (6/6)

M.EES.103 Analytical Methods in Earth and Environmental Sciences (6/6)

M.EES.104 Digital Methods in Earth and Environmental Sciences (6/4)

M.EES.105 Scientific Work (6/3)

Compulsory elective modules

Ecosystem, Evolution and Environment

M.EES.201 Environmental Geoscience (6/4)

M.EES.202 Geobiology (6/6)

M.EES.203 Environmental Geomicrobiology (6/5)

M.EES.204 Molecular Geobiology (6/6)

M.EES.205 Carbon and Organic Matter (6/4)

M.EES.206 Palaeobotany (6/4)

M.EES.207 Hydrogeochemistry (6/5)

M.EES.208 Earth Surface Dynamics and associated Hazards (6/4)

M.EES.209 Climate and Glaciation (3/2)

M.EES.210 Critical Intervals in geological History (3/2)

M.EES.211 Case Studies in Environmental Geoscience (3/3)

Compulsory elective modules

Elements, Minerals and Rocks

M.EES.301 Microanalytical Methods and Applications (6/5)

M.EES.302 Advanced inorganic Geochemistry I (6/4)

M.EES.303 Advanced inorganic Geochemistry II (6/4)

M.EES.304 Applied Isotope Geochemistry (6/4)

M.EES.306 Advanced Geomaterials (6/5)

M.EES.307 Petrochronology (6 /5)

M.EES.308 Experimental Petrology (6/5)

vi.EE3.308 Experimental Petrology (0/3)

M.EES.309 Cosmochemistry and Planetary Science (6/4)

Geology

M.EES.401 Geodynamics (6/6)

M.EES.402 Sedimentary Petrology and Economic Deposits (6/5)

M.EES.403 Diagenesis in sedimentary Basins (6/5)

M.EES.404 Sedimentary Provenance Analysis (6/4,5)

M.EES.405 Rock deformation across Scales (6/5)

M.EES.406 Deformation modelling across Scales (6/5)

M.LES.400 Detormation modeling across scales (

M.EES.407 Applied Geothermics I (6/6)

M.EES.408 Applied Geothermics II (6/4)

M.EES.409 Advanced Geological Mapping (6/6)

Elective modules

M.EES.502 Geological Field Studies (6/6)

M.EES.503 Earth and Environmental Sciences Project (6/1)

M.EES.504 Aspects of Earth and Environmental Sciences I (3/2)

M.EES.505 Aspects of Earth and Environmental Sciences II (6/4)

M.EES.506 Geological Mapping Project (12/3)

M.Geg.02 Ressourcennutzungsprobleme (6/4)

M.Geg.06 Quartäre Klima- und Landschaftsentwicklung (5/3)

... or modules from the university-wide programme.

Key Competence modules

M.EES.601 External Intership I (6 C)

M.EES.602 External Intership II (6 C)

SK.Geo.100 Gremienarbeit (3 C)

SK.Geo.200 Ehrenamtliches Engagement (6 C)

... or modules from the university's handbook of key competences.